

Decision Mathematics 2 For AQA

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Please note that the following AQA (AEB) questions used (pp. 14, 27, 28, 30, 45, 46, 47, 48, 52, 53, 68, 69, 72, 108) are *not* from the live examinations for the current specification. For GCE Advanced Level subjects, new specifications were introduced in 2001.

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Introduction

This book has been written for the Decision Mathematics module, Decision 2, of AQA.

The book is divided into chapters roughly corresponding to specification headings. Occasionally a section includes an important result that is difficult to prove or outside the specification. These sections are marked with an asterisk (*) in the section heading, and there is usually a sentence early on explaining precisely what it is that the student needs to know.

It is important to recognise that, while every effort has been made by the author and by AQA to make the books match the specification, the books do not and must not define the examination. It is conceivable that questions might be asked in the examination, examples of which do not appear specifically in the book.

Occasionally within the text paragraphs appear in a grey box. These paragraphs are usually outside the main stream of the mathematical argument, but may help to give insight, or suggest extra work or different approaches.

Numerical work is presented in a form intended to discourage premature approximation. In ongoing calculations inexact numbers appear in decimal form like 3.456..., signifying that the number is held in a calculator to more places than are given. Numbers are not rounded at this stage; the full display could be either 3.456 123 or 3.456 789. Final answers are then stated with some indication that they are approximate, for example '1.23 correct to 3 significant figures'.

There are plenty of exercises, and each chapter contains a Miscellaneous exercise which includes examination questions. Most of these questions were set in OCR examinations, and some were set in AQA examinations. Questions which go beyond examination requirements are marked by an asterisk. At the end of the book there is a set of Revision exercises and two practice examination papers. The author thanks Jan Dangerfield, who contributed to the exercises, and Hugh Neill, both of whom read the book very carefully and made many extremely useful and constructive comments.

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